

What Claimed is:

1. A fullerene derivative fine wire composed of acicular crystal of fullerene derivative.

2. A fullerene derivative fine wire composed of acicular crystal of fullerene derivative and fullerene.

3. The fullerene derivative fine wire of claim 1 or 2, wherein the fullerene derivative is selected from the group consisting of diethyl ester malonate derivative of C₆₀, N-methyl pyrrolidine derivative of C₆₀, ferrocene derivative of C₆₀, and platinum derivative of C₆₀.

4. The fullerene derivative fine wire of any of claims 1 to 3, wherein the acicular crystal is monocrystalline.

5. A manufacturing method of fullerene derivative fine wire composed of acicular crystal of fullerene derivative, being a manufacturing method of fullerene derivative fine wire comprising at least the steps of preparing a solution by dissolving fullerene derivative in a first solvent, adding a second solvent of lower fullerene derivative dissolving ability than the first solvent to this solution, forming a liquid-liquid interface between the solution and the second solvent, and depositing the fullerene derivative fine wire on the liquid-liquid interface.

6. A manufacturing method of fullerene derivative fine wire composed of acicular crystal of fullerene derivative and fullerene, being a manufacturing method of fullerene derivative fine wire comprising at least the steps of preparing a solution by dissolving fullerene derivative and fullerene in a first solvent, adding a second solvent of lower fullerene derivative dissolving ability than the first solvent to this solution, forming a liquid-liquid interface between the solution and the second solvent, and depositing the fullerene derivative fine wire on the liquid-liquid interface.

7. The manufacturing method of fullerene derivative fine wire of claim 5 or 6,

wherein the fullerene derivative is selected from the group consisting of diethyl ester malonate derivative of C₆₀, N-methyl pyrrolidine derivative of C₆₀, ferrocene derivative of C₆₀, and platinum derivative of C₆₀.

8. The manufacturing method of fullerene derivative fine wire of any of claims 5 to 7, wherein the first solvent is at least one kind selected from the group consisting of benzene, toluene, xylene, hexane, and pentane.

9. The manufacturing method of fullerene derivative fine wire of any of claims 5 to 8, wherein the second solvent is selected from the group consisting of methyl alcohol, ethyl alcohol, n-propyl alcohol, isopropyl alcohol, butyl alcohol, and pentanol.